

2841



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application

Inventor(s): Grigorov, et al.
SC/Serial No.: 10/056,536
Confirm. No.: 6040
Filed: January 22, 2002
Title: QUANTUM DEVICES BASED ON
CRYSTALLIZED ELECTRON PAIRS
AND METHODS FOR THEIR
MANUFACTURE AND USE

PATENT APPLICATION

Art Unit: 2841
Examiner: Unknown

Customer No. 23910

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence is being deposited in the United States Postal Service with sufficient postage as first class mail in an envelope addressed to **Commissioner for Patents, Washington, DC 20231**, on March 17, 2003.

D. Benjamin Borson (Attorney Signature)
D. Benjamin Borson, Reg. No. 42,349
Signature Date: March 17, 2003

RECEIVED
MAR 21 2003
TC 2800 MAIL ROOM

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56

Commissioner for Patents
Washington, DC 20231

Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56. If this is a continuation, divisional or continuation-in-part application, it is understood that the Examiner will consider all information which was considered by the Office in a parent application. MPEP §609. Such information therefore is not listed herein unless it is desired that the information be printed on a patent issuing from the subject application.

Enclosed with this statement are the following:

- ☒ Form PTO-1449. The Examiner is requested to initial the form and return it to the undersigned in accordance with M.P.E.P. §609.
- ☒ A copy of each cited document as required by 37 C.F.R. §1.98. Copies are not submitted of documents previously submitted by the applicant in a parent application from which benefit under 35 U.S.C. §120 is claimed, 37 C.F.R. §1.98(d)(1), with an information disclosure statement submitted in the parent application which complies with the Sept. 8, 2000 or subsequent revision of 37 C.F.R. §1.98(a-c). If any of the cited/submitted documents is in a foreign language, a concise explanation of relevance is provided pursuant to 37 C.F.R. §1.98(a)(3)(i). For foreign language documents cited

in a search report by a foreign patent office, the requirement for a concise explanation of relevance is satisfied by the submission herewith of an English language version of the search report. MPEP §609A(3). If a written English-language translation of a non-English language document, or portion thereof, is within the possession, custody or control of, or is readily available to any individual designated in §1.56(c), a copy of the translation accompanies this statement, 37 C.F.R. §1.98(a)(3)(ii), and satisfies the requirement for a concise explanation of relevance, MPEP §609A(3).

PTA Statement under 37 C.F.R. §1.704(d). Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the information disclosure statement.

This statement should be considered because:

☒ **37 C.F.R. §1.97(b).** This statement qualifies under 37 C.F.R. §1.97, subsection (b) because:

- (1) It is being filed within three months of the filing date of an application other than a continued prosecution application under § 1.53(d);
-- OR --
- (2) It is being filed within 3 months of entry of a national stage;
-- OR --
- (3) It is being filed before the mailing date of the first Office Action on the merits,
-- OR --
- (4) It is being filed before the mailing date of the first Office Action after the filing of a Request for Continued Examination under 37 C.F.R. §1.114.

☐ **37 C.F.R. §1.97(c).** Although it may not qualify under subsection (b), this statement qualifies under 37 C.F.R. §1.97, subsection (c) because:

- (1) It is being filed before the mailing date of a FINAL office action, a Notice of Allowance, or an action that otherwise closes prosecution in the subject application, whichever occurs first.

-- AND (check at least one of the following) --

- ☐ (1) It is accompanied by a STATEMENT as set forth in 37 C.F.R. §1.97(e).
-- OR --
- ☐ (2) It is accompanied by the \$180 fee set forth in 37 C.F.R. §1.17(p).

☐ **37 C.F.R. §1.97(d).** Although it may not qualify under subsection (b) or (c), this statement qualifies under 37 C.F.R. §1.97, subsection (d) because:

- (1) It is being filed on or before payment of the issue fee;
-- AND --
- (2) It is accompanied by a STATEMENT as set forth in 37 C.F.R. §1.97(e);
-- AND --

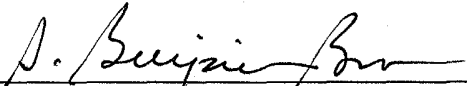
(3) It is accompanied by the \$180 fee set forth in 37 C.F.R. §1.17(p).

✓ **Fee Authorization.** The Commissioner is hereby authorized to charge underpayment of any additional fees or credit any overpayment associated with this communication to Deposit Account No. 06-1325. A duplicate copy of this authorization is enclosed.

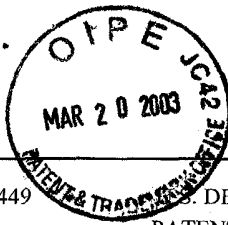
Respectfully submitted,

FLIESLER DUBB MEYER & LOVEJOY LLP

Date: March 17, 2003

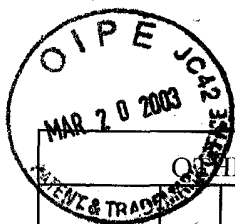
By: 
D. Benjamin Borson, Ph.D., Reg. No. 42,349

FLIESLER DUBB MEYER & LOVEJOY LLP
Four Embarcadero Center, Fourth Floor
San Francisco, California 94111-4156
Telephone (415) 362-3800



Sheet ____ of ____

Form PTO-1449 (Substitute)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Attorney Docket Number QPTC1004US0		Serial/Patent Number 10/056,536	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Applicant/Patent Owner Grigorov, et al.			
				Filing/Issue Date 1/22/02		Group Art Unit 2841	
U.S. PATENTS							
Examiner Initial		Patent Number	Issue Date	First Named Inventor	Class	Subclass	
		4,325,795	04-1982	Bourgoin	204	180R	
		5,777,292	07-1998	Grigorov et al.	204	157.15	
		6,407,443	06-2002	Chen et al.	257	616	
		6,294,450	09-2001	Chen et al.	438	597	
U.S. PATENT PUBLICATIONS							
Examiner Initial		Patent Application Publication Number	Publication Date	Applicant			
				RECEIVED MAR 21 2003 TO 2800 MAIL ROOM			
PENDING U.S. PATENT APPLICATIONS							
Examiner Initial		Application Number	Filing Date	First Named Inventor	Petition to Expunge? Yes No		



OTHER DOCUMENTS (Include author (if any), title, publisher and place of publication, date and pertinent pages)	
	Arkhangorodskii, V.M, et al., "Superconductivity at room temperature in oxidized polypropylene", JETP Lett., Vol. 51, No. 1, 10 Jan. 1990, pp. 67-72.
	Darton, Mike, et al." The Macmillan Dictionary of Measurement", 1994, pp. 90, 133.
	Demicheva, O.V., et al., Anomalous High Electroconductivity and Magnetism in Films of Silicone Natural Rubber, translation from Vysokomolekulyarnyye Soyedineniya, Seriya B, Kratkiye Soobshcheniya, Vol. 32, No. 1, November 1990, pp. 3-4.
	Eagles, D.M., "A conjectured explanation for room-temperature superconductivity in narrow channels in oxidised polypropylene", June 1993, Submitted for publication in the Proceedings of the Conference on Physics and Chemistry of Oxide Superconductors, Eugene Oregon, 27-31 July 1993, proceedings to be published in the Journal of Superconductivity.
	Farges, Jean-Pierre, editor, "Organic Conductors, Fundamentals and Applications, Chapter 1" (by William A. Little), Marcel Dekker, Inc. Publishers, 1994, pp. 1-24.
	Enikolopyan, et al., "Possible superconductivity near 300 K in oxidized polypropylene", JETP Lett. Vol. 49, No. 6, 25 March 1989, pp. 371-375.
	Krachev, et al. the "Thermopower Measurements for Quasi-ID Superconducting Channels in Matrices of Some Dielectric Polymers", Advances in Science and Technology 23, Science and Engineering of HTC Super Conductivity, ed: P. Vincenzini, Techna, Faenza, pp. 459-466 (1999).
	Grigorov, L.N., et al., "Destruction of ultrahigh conductivity of oxidized polypropylene in critical current", JETP Lett., Vol. 51, No. 4, 25 Feb. 1990, pp. 258-263.
	Grigorov, L.N., et al, "On genuine room-temperature superconductivity in high-conductivity channels in oxidized polypropylene", Superconductivity 4(2), February 1991, pp. 345-352.
	Grigorov, L.N. et al., "Room-Temperature Superconductivity in Films of Certain Polymers", Polymer Science, Vol. 35, No. 11, 1993, pp. 1625-1633.
	Grigorov, L.N., "Quantum theory of unusual heat-resistant superconductivity in polymers", Philosophical Magazine B, 1998, Vol. 78, No. 4, 353-363.
	Rogachev, et al., "The Instantaneous Resistance Transition Caused By Critical Current In Quasi-ID Superconductive Channels In Matrices Of Some Dielectric Polymers", paper from 9 th Symposium VI, Science and Engineering of HTC Superconductivity, 1999, pp. 545-550.
	Shlimak, I., et al, "Switching Phenomena in Elastic Polymer Films", Solid State Communications, Vol. 00, No. 0, pp. 000-000, 1998.
	Grigorov, L.N., et al., "The Superconductivity at Room Temperature and Much Higher in New Polymer Films", Mol. Cryst. Liq. Cryst., 1993, Vol 230, pp. 133-138.
	Peng, Z.L, et al., "Correlation Between Positron Annihilation Parameters and the Conductivity For Conducting Polymer", Materials Science Forum, Vols. 175-178 (1995), pp. 747-750.
	Smirnova, S.G., et al., "Some Characteristics of Anomalous Conduction of Thin Layers of Polypropylene", NASA Technical Translation, NASA-TT-21402, July 1993.



OTHER DOCUMENTS (Include author (if any), title, publisher and place of publication, date and pertinent pages)	
	Rogachev, D.N., et al., "Observation of Extremely Large, Field-Dependent Diamagnetism at 300 K in Certain Disordered Organic Materials", Journal of Superconductivity: Incorporating Novel Magnetism, Vol. 13, No. 6, 2000, pp. 947-949.
Examiner	Date Considered
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
*1 = Copy not submitted because it was submitted in prior application SN __/____, filed _____, 20____, relied on under 35 USC §120.	
*2 = Copy not submitted because it was submitted in prior application SN __/____, filed _____, 20____, relied on under 35 USC §120.	